



## TO-92 Plastic-Encapsulate Transistors

### 2SC536 TRANSISTOR (NPN)

#### FEATURES

Power dissipation

$P_{CM}$ : 400 mW ( $T_{amb}=25^{\circ}C$ )

Collector current

$I_{CM}$ : 100 mA

Collector-base voltage

$V_{(BR)CBO}$ : 40 V

Operating and storage junction temperature range

$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$

TO-92

1. EMITTER
2. COLLECTOR
3. BASE



#### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	30			V
Emitter-Base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=35V, I_E=0$			1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4V, I_C=0$			1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=6V, I_C=1mA$	60		960	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$			0.5	V
Transition frequency	$f_T$	$V_{CE}=6V, I_C=1mA$		100		MHz
Collector output capacitance	$C_{ob}$	$V_{CE}=6V, f=1MHz$		3.5		pF

#### CLASSIFICATION OF $h_{FE}$

Rank	D	E	F	G	H
Range	60-120	100-200	160-320	280-560	480-960